

Bombus pensylvanicus* (American Bumble Bee)*Priority 2 Species of Greatest Conservation Need (SGCN)****Class:** *Insecta* (Insects)**Order:** *Hymenoptera* (Ants, Bees, Wasps And Sawflies)**Family:** *Apidae* (Honey Bees, Bumble Bees, And Allies)**General comments:**

3 museum records; no modern occurrences post mid 1990s, despite some recent survey effort; species possibly extirpated based on well-documented range collapse, population declines and historic status in adjacent states and provinces

Species Conservation Range Maps for American Bumble Bee:Town Map: [Bombus pensylvanicus Towns.pdf](#)Subwatershed Map: [Bombus pensylvanicus HUC12.pdf](#)**SGCN Priority Ranking - Designation Criteria:****Risk of Extirpation: NA****State Special Concern or NMFS Species of Concern:***Bombus pensylvanicus* is listed as a species of Special Concern in Maine.**Recent Significant Declines:**

American Bumble Bee is currently undergoing steep population declines, which has already led to, or if unchecked is likely to lead to, local extinction and/or range contraction.

Notes: 3 museum records; no modern occurrences post mid 1990s, despite some recent survey effort; species possibly extirpated based on well-documented range collapse, population declines and historic status in adjacent states and provinces

Regional Endemic: NA**High Regional Conservation Priority: NA****High Climate Change Vulnerability: NA****Understudied rare taxa: NA****Historical:**

Species currently listed as state (SH) or global (GH) historical (by MDIFW or NatureServe) that have some reasonable probability of rediscovery with further survey effort.

State Rank: SH, **Global Rank:** G3G4, **Rounded Global Rank:** G3, **MDIFW Historical:** Yes

MDIFW Historical Notes: 3 museum records; no modern occurrences post mid 1990s, despite some recent survey effort; species possibly extirpated based on well-documented range collapse, population declines and historic status in adjacent states and provinces

Culturally Significant: NA**Habitats Assigned to American Bumble Bee:****Formation Name Agricultural****Macrogroup Name Agricultural****Habitat System Name:** Cultivated Crops **Notes:** *habitat generalist (woodland edges, open farmland and fields, etc)***Habitat System Name:** Pasture-Hay **Notes:** *habitat generalist (woodland edges, open farmland and fields, etc)***Formation Name Boreal Upland Forest****Macrogroup Name Boreal Upland Forest****Habitat System Name:** Boreal Upland Forest Macrogroup - Unknown Habitat System **Notes:** *habitat generalist (woodland edges, open farmland and fields, etc); secondary*

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Stressor Priority Level based on Severity and Actionability		Moderate Severity	High Severity
	Highly Actionable	Medium-High	High
	Moderately Actionable	Medium	Medium-High
	Actionable with Difficulty	Low	Low

IUCN Level 1 Threat Other Options**IUCN Level 2 Threat:** Lack of knowledge**Severity:** Moderate Severity**Actionability:** Highly actionable**Notes:** No modern EOs in ME; lack of comprehensive statewide survey effort to identify occurrences and determine species status**IUCN Level 1 Threat Pollution****IUCN Level 2 Threat:** Agricultural and Forestry Effluents**Severity:** Severe**Actionability:** Moderately actionable**Notes:** Pesticides (e.g., seed/nursery stock inoculation, agricultural applications); past impacts (i.e., severe declines) actionable with difficulty, but future impacts moderately actionable (e.g., changes in pesticide type and use)**IUCN Level 1 Threat Agriculture and Aquaculture****IUCN Level 2 Threat:** Annual and Perennial Non-timber crops**Severity:** Moderate Severity**Actionability:** Moderately actionable**Notes:** Habitat loss and fragmentation via intensive land management practices; can also create foraging and nesting habitat

***Bombus pensylvanicus* (American Bumble Bee)**

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Family: *Apidae* (Honey Bees, Bumble Bees, And Allies)

IUCN Level 1 Threat Residential and Commercial Development

IUCN Level 2 Threat: Commercial and Industrial Areas

Severity: Moderate Severity

Actionability: Moderately actionable

Notes: Habitat loss and fragmentation

IUCN Level 2 Threat: Housing and Urban Areas

Severity: Moderate Severity

Actionability: Moderately actionable

Notes: Habitat loss and fragmentation; can also create foraging habitat

IUCN Level 1 Threat Invasive and Other Problematic Species, Genes and Diseases

IUCN Level 2 Threat: Invasive Non-native-Alien Species-Diseases

Severity: Severe

Actionability: Actionable with difficulty

Notes: Introduced pathogens, parasites/diseases from imported commercial *Bombus* colonies; past impacts are likely irreversible, but future impacts potentially could be minimized/prevented; impacts from invasive plants?

IUCN Level 1 Threat Transportation and Service Corridors

IUCN Level 2 Threat: Roads and Railroads

Severity: Moderate Severity

Actionability: Actionable with difficulty

Notes: Collision with vehicles; habitat loss and fragmentation

Species Level Conservation Actions Assigned to American Bumble Bee:

None. *Only species specific conservation actions that address high (red) or medium-high (orange) priority stressors are summarized here.*

Conservation Actions Associated with the Bumble Bees Guild:

Conservation Action	Category: Survey and Monitoring	Biological Priority: high	Type: on-going
Conduct statewide surveys to document species diversity, distribution and relative abundance.			

Stressor(s) Addressed By This Conservation Action

Lack of knowledge

Conservation Action	Category: Research	Biological Priority: high	Type: new
Produce a statewide atlas and conservation assessment			

Stressor(s) Addressed By This Conservation Action

Lack of knowledge

Conservation Action	Category: Public Outreach	Biological Priority: moderate	Type: new
Develop and implement outreach materials to raise public awareness of native pollinator ecology, threats and conservation needs, and to encourage use of Integrated Pest Management practices.			

Stressor(s) Addressed By This Conservation Action

Agricultural and Forestry Effluents

Broad Taxonomic Group Conservation Actions:

Additional relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-1.

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Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.